PREPARATIONS FOR THE OPENING OF THE TROUT SEASON.

The Augler's Outfit and Its Selection-Maine's Bounty on Seals and Bear An Englishman's Fine Sport in the Highlands of Pern-A Cuban's Story of Shark Henting off Cobs-Stray Shots and Their Strange Performances-Little Stories of Sportsmen in the Woods,

A good warm rain storm, followed by a few days of clear spring sunshine, lasting till after March 20, and the lot of the opening day trout fishermen of New fork and Brooklyn will be the envy of every other kind of sportsman. Whatever the weather, though, every train leading out on to Long Island on the evening of the 19th, and most of the boats leading to the terminals of New Jersey railroads on the evening of March 51, will hear men beside whom will lie fish creeks, who will hold in their hands their rod cases lest they be harmed. Should the paper, which every fisherman will surely have in his pocket, prophesy evil for March 30, he will put it into his pocket or throw it onto the floor, and, rubbing off the window glass, will neer out into the dark looking for a eign of his kind of a fair day.

The chances are that the fisherman will be a

club man, bound for some cosey little cottage beside a stream where there are trout a plenty for the best of Long Island streams are not open to the host. At the club houses will be little groups of men telling off chances, each one fingering some part of his tackle, setting the click to his reel, and pulling off the line, to wind it up again evenly, in a nervous, expectant way. The swell fisherman has a split bamboo rod of the latest "style, fancifully wound, with the tip thicker in proportion to the middle joint, and the butt thinner in like proportion than in years gone by. It is the nost delicate rod man knows how to make, weighing anywhere from three and a half ounces up to eight or nine ources and from seven to nine feet long. The rod most favored by fishermen weighs from six to seven ounces, is nine feet long, fairly stiff, so that long-range fly casting may be comfortably accomplished and quick strikes possible. With this kind of rol any sized trout can be landed with flies or light balt-grasshoppers, angle worms, or min-nows an inch and a half long. But for heavy bait fishing with large minnows or shiners a special bait rod is made, considerably heavier, with the reel seat above instead of below the rubber composition handle.

The less stylish fisherman has a large variety of rods and other tackle to select from. He can get a poor split bamboo red for from one to five dollars, or a fine wood rod for from three to six dollars. He can get a substantial three-jointed rod, more properly a pole, for fifty or seventy-five cents. The reel is an important part of a fisherman's outfit. On it depends much of his success. The regulation tront reel

notes from threy to nitrey are set either of either to all eithst tant can be set is more than useful. A reel that has been on the market long enough to be pretty well tested seems to have filled a the line is pulled of. When winding it up it rans as freely as a free-running reel. It is a the line is pulled of. When winding it up it rans as freely as a free-running reel. It is a the line is pulled of. When winding it up it rans as freely as a free-running reel. It is a the line is pulled of. When winding it is rans as freely as a free-running reel. It is a the line is pulled of. It is a the line in the line is pulled of. It is a the line will appreciate what this means, as with this reel such a cross and the dealers all recommend a single action reel without balance bright of the line of itself by the movement of sarching trans, is used by a good many fishermen in prefer here with a sering in fire makes up, which, wind up it line of itself by the movement of sarching drag, is used by a good many fishermen in prefer here to use it, it being a matter of choice as to what breeds the most fun.

Many a man has wailed as the 'big un' propor quality line. The best lines, unlike the propor quality line. The best lines, unlike the propor quality line. The best lines, unlike the lifetime. Water soaks through the best first line and the propor quality line. The best lines will line strength and the lifetime. Water soaks through the best line last rand lines of the part will obtain a series of the lifetime. Water soaks through the lifetime. Water soaks through the lifetime. Water soaks through the careless the proportion of the prevention of the lifetime. Water so he had a lifetime to the lifetime. The safety lifetime to careless the lifetime of the proportion of the lifetime. The lifetime had been done to the lifetime of the lifetime. The lifetime had been done to the lifeti

sinks his mouse with several buckshot, if it is deed, into the deep trout pool. If the animal still lives he hooks it lightly through the back and lets it splash into the water. Red scuirrels have been known to be captured by trout as they swam the West Canada, while very often a chimunk or striped squirrel is used with success as bait; but of course only large frout, over two pounds, are so taken.

Moset of the fishermen will go in to get trout to count and not to weigh or measure, on the first few days, and fishing will be mostly in the smaller streams, but later the efforts will be to get the "big un" lost last year. The man who fakes more man balt than trout balt will buy his lish most likely.

When the streams are so cold as they now are a pair of hip boots is a great comfort, as with shoes one is sure to get his feet wet, and wet feet are a misery on cold days, besides it is often necessary to wade to be able to reach the trout. Many prefer to wade anyhow, and these will find the hig boots a substantial comfort. A pair of hig horizale along them, especially if the feet of the boots are thin, will save the boots from too much wear. Dark or gray old suits of clothes, and therefore not conspicuous ones, are preferred by most fishermen. A small, neat hat is also an advantage.

Some use landing nets, some do not, but an expect considers a landing net indispensable while fishing large streams, but in brooks

Some use landing nets, some do not, but an expert considers a landing net indispensable while fishing large streams, but in brooks they are mostly a nuisance. It is not a strange fact that pecket scales are not very much sold in proportion to the number of fishermen. They are cheap—thirty five cents will get an accurate pair that will weigh fifteen pounds by two or four ounce jumps. When asked why this is so, a dealer said that he believed the fishermen found the estimated weight more satisfactory than that given by the scales.

Making one's own tackle is a pleasant pastime, but more expensive. It is a useful knack to know how to tie files, and the flytying kit is not too large to take into the woods. Very often a kind of real fly appears which is taken by the fish with tantalizing frequency to the fisherman whose files are refused. Then is the time the maker of his own files sits down and soon has an artificial fly that for the time takes the fish with the greatest of ease and regularity.

Those fishermen who want to make a big count score will do weil to take a six-inch rule with them to see that they save none shorter than six inches—estimated lengths don't go with the constables, who will be around to see that no one violates the law forbidding the papture of trout less than six inches long.

### HABITS OF THE SHAD. Some Interesting Facts About Its Incoming

from the Sea, The shad spends part of its life at sea and part of it in fresh water. At the approach of the spawning season it comes in from the sea and seeks the fresh water streams to spawn; at the close of this season it goes to sea again, there to remain until the spawning season again returns.

It is not known absolutely whether the shad remains in deep water in the ocean off the ap-proach of the river whence it came, or whether n winter it goes South into warmer waters, but it is commonly believed that when the shad returns from whatever point at sea it may to fresh water come, it returns to the river in which it was born, but a percentage of the shad do not return: It may be a great percentage.

It is certainly the expectation when shad fry are placed in such a river as the Hudson that the young fish which survive and go to sea will return to the Hudson; here the shores of Long Island and New Jersey would serve as a great funnel to guide the fish, if they needed guidance, to the opening to the bay and river.

It is not supposed, however, that the shad of a river basin, like that of Chesaneake Bay, for example, return each group to its own particular stream; in Chesapeake Bay shad would come in from the sea together, but once inside the bay they would be likely to seek each the most convenient of the streams emptying into it. Shad have sometimes been caught in New York Bay in the early part of the season with the roe much advanced. These may be simply individual cases of early maturity in shad belonging here; shad correspondingly late have been caught here. Hoe shad have been taken in the bay as late as August, but generally the shad come in with the roe in the condition that might be expected in fish that knew where they were going and when they were going to get there, and fishermen incline to think of the early shad with the advance roe that it is one that from some cause, perhaps stress of weather, has overrun its river.

That the shad does not always seek its own river is plainly shown on the Pacific coest, where the shad is not native, but was introduced from the East. Shad were planted there chiefly in the Sakrapnento Hiver, but they have now scread all along the coast as far north as southern Alaska. There is, however, along the Pacific coast a cold current which the shad does not seek to pass; it is found in the bays and estuaries, and can be caught the year round, and the natural barrier that prevents its making an offing has doubtless led to its general movement along the coast. young fish which survive and go to sea will return to the Hudson; here the shores of Long

## THE ELECTRIC SUCKER.

A German's Account of a Wonderful Fish Found in the Nile,

In an article in Ueber Land und Meer "Electrical Phenomena in the Animal World," Dr. Frölich tells about a sucker first found in the Nile and its tributaries by modern scientifle men in 1881, but well known to the ancient Egyptians as the "sucker thunderer god," being worshipped as such in a sucker god temple in the city of the thunder-sucker, or Oryrrhynchos. The reason they called it the thunbecause they knew of another fish, known to the English-speaking people as the electric cat (fish), to the Germans as the Zitterwels, or the shad-that-makes-one-tremble. It grows to a length of about a foot, of which the head and shad-that-makes-one-tremble. It grows to a length of about a foot, of which the head and nose take up a quarter, and at the deepest part measures more than a quarter of its length.

Just why the modern scientific men did not know of this fish before is a question a layman finds; it hard to answer except that; he sucker is a bottomy fish. The old Egyptians probably learned of the animal after a Nile flood, when some philosopher was meditating over a mud puddle left by the receding water. He saw a funny fish struggling in the water, and, out of a desire for knowledge, reached for the fish and touched it. If there were any disciples of the philosopher act surprisingly—as the stoic Indian did when he got hold of a galvanic battery. Thereafter the fish was worshipped, having aname which associated it with the "Thunder-god of the skies," although the ancients knew nothing of electrisity according to the learned of to-day.

A peculiar thing about the various electrical fish is that should one swim, even at a considerable distance from a human bather, the bather would know of its proximity by an "electrical sensation," while many of them have batteries actually fit to kill a horse on contact. These fish are far ahead of the isuman beings in the matter of weapons, "for they stun their prey at a great distance in the water."

### SPORT FOR DARING MEN. Shark Hunting Off Cuba as Described by a If there is any one who has tired of the tam

sport of shooting deer, moose, panthers, wild-

ats, brown and grizzly bears, and of catching little trout, black bass, and salmon, and has a longing for sport with a swing to it, let him go to Cuba. Besides the chances of being captured, or shot by Spaniards as a spy, he will find there a sport which, for real live danger, is unequalied, even by the killing of a roaring wounded tiger, the charge of a herd of angered elephants, and beside which even wounded bull moose are no longer charming According to a Cuban new in Brooklyn, shark fishing is a sport to be dreamed about. The Cuban shark fishermen take chunks of beef and throw them overboard out beyond the reefs, where the dorsal fins of sharks are

beef and throw them overbeard out beyond the reefs, where the dorsal fins of sharks are to be seen cutting the water with a victous swish, like the plunge of a modern rifle bullet into a stream. Instantly there is a rush, fit to make ordinarily brave men blanch, for the eagerness of the sharks to rend the bloody meat is something to think twice about. Now is the time for the sportsman to do as the cuban fisherman does. Stripping off his light clothes, grasping a long keen knife, he lears among the fish, and thrusis the knife to the nearest shark a heart. A quick wrench opens a wound that spurts blood, and then the stort fairly begins. It is death to a man who then loses his nerve. There is hope for the bick-feverish man who is facing a wounded tigor, but none for the man among the sharks. The "Culan expert vatches his chances, and as the sharks, attracted by the blood, come to tear their mate to pieces, he strikes them one by one, and soon the water is filled with sharks flapling their last in the water red with blood. When a shark comes for him, he glides to one side, and as the shark rushes past on its side he strikes it dead, lings of twenty-live or thirty man-eating sharks may be captured thus in a few minutes. The teeth are the trophics. To get them the head is boiled in a big fron seap cal dron. A tooth of a healthy shark is ivery whits, with a hard, porcelain finish, and could be worn as a trophy. There are several rowe of these teeth. One row of then cut out would look like a saw, the teeth being obtusty triangular, each exposed edge of a single tooth being cut into minute teeth. The would look like a say, the feeth pelin obtained it triangular, each exposed edge of a single trooth being cut into minute teeth. The sharks litte a man's leg off, and do not tear it off, as is generally supposed. Indians make long strings out of these teeth for loads, that the squars may think much of the lumiers, and one would suppose that a string of them would not be unacceptable to a paieface's

sweetbeart. The sharks may be taken in a variety of other ways. Rifles, spears, harpoons, lawore (snares), or fishhoods a froziong. And they are taken often in nets, but not because the netter wants to take them, as they tear and tangle the nets for rods.

CATCHING TARPON NOW.

Nome Big Fellows Reported to Have Been

The first report of the tarpon fishing season is from Punta Rassa, Fia., to the Forest and Stream, and says that W. I., Boyle, a New Yorker, who is cruising in the yacht Tarpon. killed the first one on Feb. 27. Since then several of the big fish have been taken.

It took the tarpon fishers a good while to learn how to make tarpon fishing a sport. They use now half to pound mullets, an eight-foot rod of substantial proportions, a very large reel, with a long, powerful line, and a peculiar hook on it that has a yard or so of non-chewable buckskin, wire or twisted cat gut for the snood, so that the fish can't bite Itself free.
The hook and most of the snood are swal

owed. Before they knew how to fish for tarpon, the anglers struck almost as soon as the ine started off, but now they walt a while. The line started off, but now they wait a waite. Ine fish's mouth is too hard to be penetrated by the hook, and striking alarmed the fish. After taking the balt, the fish always spits it out, and swims away and comes back satisfied that it is all right, and at a gulp swallows it. "clean to the tip of his tall," and goes looking for more. In three jiffies the sportsman yanks up his rod and the fish is fast. Then comes a job that makes one's arms ache, and may or may not bring the fish to gaff.

A well-known manufacturer of fishing tackle was up in the Adirondacks last summer fishing. He had a guide very popular among visitors to the Blue Mountain Lake region, and this guide was using a home-made gaff which was so much better than ordinary gaffs that the manufacturer began to talk basiness instead of fishing. The gaff was made out of old files, and had two hooks that closed down on one another into the big fish or opened up at a simple twist or jerk of one hand. The gaff hooked into both sides of the fish instead of into one, as the old style did. The guide got a substantial price for his invention, and the tarpon fisherman has found a gaff especially adapted to his use.

The record boards of tarpon fishing clubs are kept by tacking a single scale of each fish taken to a plank, with the date, catcher's nurse, sfid weight written below it. These notebooks make interesting reading. fish's mouth is too hard to be penetrated by

## BOUNTIES IN SEALS.

Why Maine Still Page a Bounty and Last Year Raised It to 81 a Head,

Maine paid bounties on 1,602 seals and on 05 bears in 1895. In 1894 only 385 seals and 550 bears were killed. The increase of seal killing is due to a 50 cent increase of the bounty, making it \$1. The bears have been thinned out by excessive killing. Why there should be a bounty on seals is plain to those who know that in a year a single seal consumes some 3,850 pounds of fish, which would sumes some 3,650 pounds of fish, which would make 6,046,300 pounds saved by the killing of the 1,662 seals in 1895. Most of the lish eaten are coarse-grained, such as are used in baiting lobster pots—sculpins, flounders, tom-cods, &c.—but not a few valuable fish, like herring, salmon, and mackerel, are killed by these animals. Much difficulty is experienced by seal hunters in securing all of the animals killed. Many badly wounded ones escape, and probably more than 2,000 seals were killed during 1895.

No one knows exactly why bountles are paid on black bears. They are harmless animals, according to competent observers, feeding on beachnuts, wild fruits of various kinds, on carrion and roots of plants, seldom of ever molesting farmers in any way. Maine pays \$5 and New York \$10 a head for killing these good-natured creatures.

### BIRDS AND ECLIPSES.

Wild Ducks that Bidn't Fly on the Night of a Lunar Eclipse. That wild fowl observe natural phenomena

the notes on this subject is the effect of a nearly total celipse of the moon on wild fowl. Abel Chapman writes to the London Field that "on the afternoon of Feb. 28 four of us set out for the evening flight of ducks. We were not aware of the impending eclipse, but hardly had we got comfortably laid down on our backs in the mud, each man on an ollskin. with an armful of bent grass for a pillow, than we became aware that an almost total eclipse was in progress. The eclipse lasted some three hours, and the moon was not fairly clear till past 9 P. M. We lay shivering in the cold till past 9 P. M. We lay shivering in the cold till it was fairly light again, and then were able to find our way home. Scarcely a duck flew. The previous night they had shown up in force, but this night not a cartridge was emptied. If they came later I do not know." An eclipse of the sun has an extraordinary effect on the noisy birds of tropical regions, according to various writers. As the light begans to fade the bird cries hush-away in doubtful squeaks and cries of alurm. "The stillness can be felt. The whishing wings of a fierce bird of prey send a wave of frightened cries before the advancing monarch—a sound that adds heart beats even to the civilized man's breast. Savage men add to the confusion with weird cries and tom tom beats. Once the sun is clear again a cry of joy is heard throughout the forest, as if the birds were welcoming the bright rays back, and the monkeys seem fairly beside themselves with joy. The swallows fly fiercely, as if released from hateful captivity." Whether the lower orders in water observe this phenomena or not is not known, and it cannot be told if thirsty feathered wanderers in desert lands see mirages or not, but the quickened footsteps of the camel when one of nature's false-speaking lures appears on the Great Sahara leads the naturalist to believe that many a bird and animal dies a tortured death where the breath of the wind is hot, in the view of one of these false lakes. Before the scientific researches of the Government into the Death Valley of California were made, most absurd tales were told, such as those of birds did die, but not so quick a death nor so merciful a one. it was fairly light again, and then were able

### DEHON'S BIG BAGS OF DUCKS Killed 350 One Day and 450 the Next, to

the Disgust of a Sportsmen's Paper. Hunting had been forbidden for some time on a farm near Abbeville, La., and in consequence the ducks for miles around flew there, and were in immense flocks on the several small lakes. One day the owner, Emile De-

small lakes. One day the owner, Emile Dehoe, went out with a gun and got 350 of the birds, and, according to the report, got 140 with three shots. Next day he got 450, using a 12-gauge gun both days. A well-known sports neu's naper calls this "malicious shooting," and says it is fortunate for this man that "capital punishment is not possible." Conservative sportsmen estimate that Dehon did not overstep his share of birds. Here was a man who seldem hunted, in spite of his opportunities, but who chose to kill his game in two days instead of two weeks, like an ordinary sportsman. Had Dehon se wished he could have killed thousands by indictous shooting during the fall. If Mr. Dehon will spend two days shooting during the year, killing soo or 1,000 ducks, then allowing the birds to rest for the rest of the time, he will be doing a service far greater than the man who calls him a "game annihilator," yet kills two or six thousand ducks a year.

from 15,000 to 18,000 feet above the sea on grassy plains or in valleys surrounded by high mountains." There is considerable small game-suipe, ducks, cull-cull to kind of grouse and quivlo a kind of guinea fowl- but the game a sportsman out for a day or two seeks is vicufia and almacs. The vicufia is the wild llama, and is a shy animal with great vitality, requiring neck or shoulder shots to kill. 'The alpaca is the mountain vicuda, living on tho warse and scanty forage of its home region. Its wool is a foot long, but so curly and fine that it fits to its body like a darky's hair. Both are related closely to the guanaco of

Both are related closely to the guanaco of the Patagonia deserts, which sometimes wanders into the uplands of Peru.

The Englishman carried a 44-46 Americanritle and a 16 gauge shotgun for small game.

"Entering a large pampa," he writes, "we sighted a herd of vicuna. We tried to ride around them, but they made off, passing Ashmore at about 200 wards. Lying down, he opened fire and a fine specimen rolled over. We cleaned it, loaded it onto a nack mule, and rode on, soon striking another herd of seven, which at once mane off, but my second shot at 140 yards drupped one dead. This we took, and soon after bargest two braces or call cult.

130 yards, and some of the others hit the valley. The dead animal were loaded on the pack mules, and after going over the summit of an 18,000-foot mountain, the hunters had the rare good fortune fer that rezion of jumping seven guanaco, which ran too fast for the mules the men rode, and struck a gait across the pampa discouraging to the hunters.

"But leaping from my mule." says the writer, "and sighting my vills at 400 yards, I dropped a builet ahead of them, and the bunch of dust scared them to a standatill. I then plumped the remaining him bullets into the herd, and two fell dead."

A 38-55 fills would have been better for such long-range work, and a 40-82 still better; but no matter, the guanacos were killed, one was 45 inches high and weighed 75 pounds dressed. The total bag was two guanacos, seven vicuna, seven brace of cull-cull, one brace quivio, five ducks, three snices, and no end fun. The end of the hunt was to the tunes of a banjo and a plano.

### EPIDEMIC AMONG FOXES.

Virginia Foxes Dying of a Strange Disease

A disease resembling distemper is killing the foxes in Gloucester county, Va. Large numbers of the foxes have been found sick or dead. A dozen foxes or more, when found by the bounds, made no run or fight at all, and were killed, apparently being helpless and unable to

put up a fight for life. Some years ago one of the Hatfields told a Sun reporter, who was looking up the Hatfield-McCoy fend in West Virginia, that before the McCoy feud in West Virginia, that before the feud started there had been deer a plenty in the region, but that suddenly the deer were stricken with "black throat" or "black tongue" and died, being found all through the woods. Various other animals have been carried away in this manner, and there are steeps afoot to kill off the Australian rabbits by an introduced epidemic. It is necessary to make careful experiments lest the disease infect, say, the sheep and men of the region. This is the objection to killing off the English sparrows by disease. It would be a dire misportune should a missuided man try to kill the English sparrows, and, in succeeding, also kill the native birds and animals as well.

## DIAMOND EYES FOR A MINK.

Startling Work of a Taxidermist Who Did Not Care for Nature.

When a maker of fashionable goods starts in natural history some amazing combinations are the inevitable result. A few nights ago there was a handsome young woman in becoming attire in a bridge car at about 11:15 o'clock. Around her neck was a mink skin boa, got up in a caricature of the living animal. The fur was a rich brown, the feet were fairly natural, and the tail perfect. The body had been stretched a little too much for symmetry, but up to the ears the representation was near enough to the natural form to satisfy an annatur taxidermist. But the head was a fox head in miniature. Minks have pure black eyes which are very prominent. The eyes on this boa were also conspicuous. If they were meant as a display of wealth, they were meant as a display of wealth, they were elera display such boas frequently in their windows. From the naturalist's viewpoint a pair of black shoe buttons would have been very much better.

The heads of boas seem to have been made from the same pattern, whether the fur was from a fox, mink, cat, muskrat, marten, weafoun a fox skink (sable). It would be a relief to see a boa by some expert taxidermist with a view for naturalness as well as tastefulness. metry, but up to the ears the representation

### BIRD CO-OPERATION. There Are Few Birds but Will Ald a Com-

Miss Marie Dobson reports from Brooklyn

that the sparrows have already begun nest building in that city, in spite of snow and cold. She was walking along Gates avenue on March 15, when her attention was drawn to a sparrow in the street which had a long black fibre, probably a horsehair or black thread. in its bill. With considerable effort it flew to here can be no doubt. The latest addition to near-by tree, in a fork of which appeared a bunch of twigs, strings, and other ground-

work of a nest.

For some reason, the bird had trouble with the string as it tried to arrange it in the preper position for the nest. It got very angry, apparently, and began to chirp and scold. Thereupon along came three other sparrows. which at once took hold of the string and together they moulded it into position.

Considering the recent weather, this is early for the birds to be mating and nest building, but from the naturalists' point of ounding, but from the naturalists point of view, the coming of several sparrows to the aid of a troubled one is of far greater interest than the early nesting. Cooperation of birds has been as yet but slightly observed, although frequent instances of birds helping one another are recorded in various papers on natural hismovements told of much fatigue. Then two carles that had been seated on a dead tree of the mainland rose and went flying toward the tired bird. It looked as if highway robbery was going to be committed, but it wasa't.

One of the newcomers took the place of the fired bird, and towed the dead one till tired. Then its place was taken by the third bird. By the time the third bird was tried the first was rested and took its turn again. When the dead bird was finally gotten to shore, the three feasted together as amicably as crows.

Another authentic story is that of a pair of young and inexperienced swallows that were in a hurry to get a nest built in an old barn up in Connecticut one spring. They hustled and slapped the mud into place on the inside of the barn in a most careless, hasty sort of way, and at last, along about 2 o'clock in the afternoon, just as the finishing touches were being made, down it dropped to the floor. Both thirds chirped mournfully. Soon the male flew out of the barn and away out of sight, while the female sat on a beam discousoiate. Pretty soon swallows began to arrive until there were over forty—more than could be counted—present. They flew into the barn and out of it, as if at play. After a while they made out of mud and went into the barn to pinster it on where the collapsed nest had been, and then returned for more. For two hours there was a stream of ingoing and outgoing birds, and they creased only when the nest, a big substantial one, had been built and well lined with soft stuff. What they said to the young pair of swallows is not known, but next morning the nest had been need of hasts.

HILD PLIGEOUS NOT ALL GONE

### WILD PIGEONS NOT ALL GONE. Occasional Flocks Reported in the East as

Wild pigeons are still seen in small numbers in various localities. Two hundred and over ere seen on March 1 at Mechanicsburg, O., and on March 4 a flock of several thousand ere seen travelling south over the same place. They are still found in limited numbers in the Indian Territory and throughout the adjacent States. An occasional bunch is reported from Pennsylvania and western New York. from Pennsylvania and western New York, vice far greater than the man who calls him a "game annihilator," yet kills two or six thousand ducks a year.

HUNTING PERUFIAN GAME,

As Englishman's Account of His Fine Sport in the Highlands.

Hunting in the highlands of Peru is a very enjoyable if little known sport according to an Englishman "who spent some days hunting from 15,000 to 18,000 feet above the sea on

People unacquainted with natural history have no idea of what a student of even a branch of it must know. A man who makes a specialty of bats runs up against a marveilous array of animals likewise the students of the squirrels and mice, birds, fish, and any of the squirrels and mice, birds, fish, and any of the rest. Friedlander & Sons, German publishers, are about to get out a work enumerating the described species of the animal kingdom. About 100 volumes of, say, 750 pages each will be required. This will allow live animals to the mage. There are about 386,000 animals known. Any one who would like to know what this means should sit down and with a pencil write down the names of all the different kinds of animals he or she can think of—mammals, birds, reptiles, fish, bectles, butterflies, and mollinsks. Subtract the result from the 386,000 and the calculator will be astonished at what a lot be doesn't know.

## The Use of Decoy Buchs.

Some weeks ago a man wrote to the Forest and Stream saying that a man who would call a moose is no sportsman. Now another man prepared everything from blind to lunch. The Forest and Stream has a department called the "Camp Fire Flickerings," into which it puts stories and suggestions untrue to human nature, and so beyond all belief or reason. That is where the decoy kicker found his letter.

Side Hunts for " Varmints."

The Tacoma, Washington, Rifle, Rod, and Gun Club had a side hunt recently, in which only " varmints" were killed. By " varmints they meant anything that was deadly to any recognized game. They chose sides of eight each and the hunt lasted seven days, on five of which the weather was drizzly and wet. Here is what they killed: One weasel, 58 crows, 2 magnles, 7 coons, 9 owls, 3 minks, 1 eagle, 36

skunks, 4 hawks, and 2 wildcats.

There was a time when side hunts were extremely popular, everything counting, from game to vermin, and it was usually the game heads that counted most, but now that there is solittle game it is no longer ropular to kill for count, because it savors too much of killing for price. Vermin hunts have been recorded in noreasing numbers from time to time for some lears back, while squirrel hunts are rapidly go-ng out of favor.

years back, while squirrel hunts are rapidly going out of favor.

They held a squirrel hunt lasting one day up in Herkimer county once. All the kinds of squirrels they have there are red and ground squirrels, and being midwinter the ground squirrels were all hibernatine. The hunters got three bushels of red squirrels, two bushels of rabbits (varying hares), and half a dozen foxes. That night they had a supper and dance, the losing side raying for it. These hunts usually wind up in a dance, so that the women folks can have their snare of the sport, too.

### One Way of Catching Piddler Crabs.

There are various ways of catching fiddle One way of catching the black or mud fiddler, the one that bores into meadow banks along sait creeks, is with two boards so placed as to form a deep-sided letter V. The fisherman seeks a spot where there is a little strip of sand at low water, between the base of the mud bank and the water's edge. The crabs come out of their holes and go down to the edge of the water, often in great numbers. The fisherman comes over the meadow with his boards, which he rets up on edge as quietly as he can on the sand, with the opening of the V toward the water. Then he alarms the crabs, and they come scurrying up the little bench in multitudes, bound for their hojes. As they come they carry their big claws loft, somewhat as the soldier carries his gun. It is from this habit that the fiddler crab gets the name of soldier crab by which it is also known. Those crabs that are opposite the opening in the V huatle with the rest of the line, but when they strike the board sides they are thrown more and more together, until they converge in a mass at the point. The fisherman, sitting outside, takes them out by the handful. edge of the water, often in great numbers. The

Danger in Wandering Shot. In splie of the utmost care on the part of shooters, there are many fatal or maining accidents. What happens when no care is exreised is a matter of almost daily report for newspapers. Bullets glance around corners in a way that makes the woods always a place of danger. The eccentric courses of shot from shotguns are seldom known, but certain it is that they sometimes leave the muzzles of the guns to fly almost at right angles to the direction of the aim. An Englishman aimed at a driver pheasant, high in the air. His host was far out of the ordinary range of the gun, as it was then aimed. One of the shot hit him in the neck. The shot had left the gun at an angle that took it five rols to one side of the direction the rest of the charge took. Like accidents have been recorded, while many kills of game are told of that are inexplicable save by the fact of a wandering shot. So it is that many of the knowing sportsmen refuse to shoot unless all persons are directly to the right or left of them, lest a stray puts out an eye. n a way that makes the woods always a place

### Dunraven's Rangelous Pich.

The Earl of Dunraven, finding that ther vere too many pike in his waters at Adare Manor, county Limerick, Ireland, for suc-cessful trout fishing, recently ordered his professional fisherman to capture what he could of them. Thirty-four have teen taken so far of an average weight of nine pounds each, the largest weighing twenty-three pounds and the smallest two pounds. Why three-fourths of them were females is not understood at all. That there was need of taking out the pike it shown by the fact that several of the fish contained trout, and nearly all the females were heavy with spawn. The pickerel fry feel on the trout and salmon fry, being far better lighters than equal-sized trout.

The greatest of care is necessary at fish hatcheries to prevent the pickerel fry from setting among the fry of other varieties. A dozen small pickerel in a year will destroy thousands of other small fish, and the loss is very considerable. professional fisherman to capture what he

A Wolf's Race for Life, An American Field correspondent, writing from Edwardsville, Ill., reports the killing of wolf ahead of a foxhound pack less than are recorded in various papers on natural history. An eagle was once seen to dive at and seize a large cormorant in a Florida bay. The eagle killed the bird very quickly, and then rose out of the water with it, endeavoring to fly, but the prey was too heavy, and both birds sank to the water. Then the eagle started to tow it toward shore, and very soon its wing movements told of much fatigue. Then two carles that had been scated on a dead tree of the maintand rose and went flying toward the bay, but were afraid to tackle the unity looking

covered with mu. Perhaps they were too tired to fight.

An old sporteman said it was a gray timber wolf, probably driven down from the Illinois timber bottoms by hunters hounds, and had been picked up later by the Edwardsville pack. The skin will be preserved and mounted as a rare curiosity for that place.

The Fiddler Crab in Winter Quarters, In winter, when the surface of the ground in which it is accustomed to burrow may become frozen or covered with ice, the fiddler crab bores deep into the mud or sand and stays until spring. The black or mud fiddler fairly riddles the meadow banks along the salt riddles the meadow banks along the salt creeks; it bores in, usually horizontally, and it may be as far as six or eight feet from the face of the bank, and then down into the mud at various angles until it gets below the level of the tide, which rises and falls, through the loose mud, in the fiddler crab's burrow. There are myriads of the black fiddlers, and they so horeycomb the bank that sometimes under the added weight of fee gathered upon the top of it the bank breaks down.

## Oddly Colored Squirrels.

Some oddly colored squirrels are said to have been taken near Belleville, Ont. A black squirrel, with numerous white spots, was killed by Hull Austin, and another man got a foxplored black squirrel. The queerest two were black squirrels, one with a red tail and the other with a big white spot on the breast and other with a big white spot on the breast and one on the back.

A cream-colored black squirrei and a "snow-white" one, both rufous-brown on the under parts, were killed.

Such groups of odd animals are often noted in certain heighborhoods. In some places freak robins will be seen every year; in another, it is oddly colored quali.

## It Surprised the Gull.

On Thursday morning at 10:10 o'clock a white gull was seen up the East River coming down at a comfortable speed with the tide from down at a comfortable speed with the tide from toward Hariem. Just as the bird was flying under the big bridge a wagon load of snow was dumped on the north driveway, and several men began to shovel the stuff off the bridge. The bird anddenly found itself in the most surprising snow storm it had ever seen. A lump the size of a big man's flet handed on its back, a chunk that its wings, and the bird flew wildly, like a pigeon dodging a hawk. When it got out from under the bridge out of reach of the show, the galt it took toward staten Island would have shamed a peregring falcon.

## Florida Wildeats.

Two sportsmen are reported to have killed six wildcats during one week's shooting near Jacksonville, Fig., recently, while quali hunting. Probably some of the cats were young ones, as old wildcats usually do not allow themselves to be killed at the rate of one a day in a given locality. In some respects an old Tom wildcat is as wise as a fox or an old black coon.

## Improving a Gama Park.

Aust'u Corbin is fencing in some more land adjacent to the sputhern boundary of his Blue Mountain game park. This fence is made of whe neiting with two inch mesh, and is nine feet high. Mr. Corbin will, in this enclosure surrounded by four miles of fence, enjoy the sport of fox hunting after a style little known by American hunters. Similar sport is very popular in Europe.

## 2 100 Gauces of Strychnine for Squiercia.

The Commissioners of Walla Walla county. Wash., have distributed 2,100 conces of strychnine in the hopes of killing off most ; strychine in the noise of a time there is a the squirrels in that region, where there is a plague of them. A like plague was reported from threson recently, where a local organiza-tion offered a reward for the killing of these too numerous squirrels.

### GROWTH OF TRAP SHOOTING.

Work with Innimate Targets Has Greatly Popularized the Sport.

Perhaps among the readers of THE SUN there are few who have a correct idea of how much the sport of inanimate bird or artificial target shooting is practised. Capt. Begardus was probably the first to infuse new life into shooting in general and trap shooting in particular, by the introduction, over twenty yea a ago, of the glass ball as a flying target. was the means of booming the sport and of the organization of numerous gun clubs throughout the country. Previous to that time all trap shooting was done with live pigeons for targets, and was generally frowned upon by most pecple, even by those who indulged in game shoot-Outside of a few gun clubs which numbered

outside of a few gun clubs which numbered in their member-ship such men as Messra, Georgo Lorillard, Carroll Livingston, and Perry Belmont, and such clubs as the Narraganset and Long Branch, there were hardly any real organizations for shooting purposes, although Long Island boasted of the Fountain and Long Island clubs and a few of lesser note. But the introduction of the glass ball as a substitute for live pigeons in trap shooting gave an impetus to the sport, which has increased up to the present time and bids fair to keep on increasing indefinitely. The glass ball served its term as an entering wedge, but it had its drawbacks, among which was the broken glass that ruined grass and spoiled the ground on which it fell. A number of substitutes were tried without much success, and experiments proved that the balls must be made very light to insure breaking by the shot. No means had been successfully invented, however, to clange the direction of their flight, so the shooting became monotonous, and a fair shot could score nearly all of them.

About this time, 1880, a genuis in Cincinnati, George Ligowsky, invented the clay pigeon, so called, and a trap to throw it. The device was so unique in idea and so much like real live bird shooting that languishing gun clubs reorganized, and from that time on the clay pigeon, although halled with delight by the trap shooters, was only a stepping stone, however, having the fault of being occasionally baked too hard thing else except war. The clay pigeon, although halled with delight by the trap shooters, was only a stepping stone, however, having the fault of being occasionally baked too hard lit was burned or baked like bricks! So some shooting men in Knoxville, Teun, purchased the right to make artificial targets from a mixture of pitch, plaster, and other ingredients, a patent having been issued for this combination in the manufacture of entirely different articles. The same bright spirits cudgelled their brains to make a trap to throw these new artificial birds in a stricter imitation of the flight of the live ones, and succeeded to such an extent that the business has grown until the entire output of the factories for making the targets was some twenty-five millions in 1895.

Of course the great number of shooters and clubs who indulged in the sport needed laws to guide them, and most of them had their own rules, which, if read now, would show some ridiculous mistakes. In 1885 the National Gun Association was organized in New Orleans, and the preface to the prospectus may be quoted to show that the projectors of the enterprise had more in their minds than target shooting. The wording of the document was as follows:

If there is any one amusement more than another that should be pixed uron anxilonal footing it is

wording of the document was as follows:
If there is any one amusement more than another
that should be placed upon a national footing. It is
that of the gun. This for various reasons
1. In that it is conducive to health, being essentially
an outdoor amusement. To be a good shot requires
temperance in the use of both liquors and tobacco
and regularity of living; one must callivate entire
control of the nerves, quickness of the eye, and generally correct functions of the brain powers.
2. In that it is conducive to the military strength of
the country, taking the place of the forcet military
service in time of peace of foreign Governments. A
man who is familiar with the use of the shotgun is
more than haif a trained solder.

At the first meeting of the association nearly a nundred gentlemen interested in shooting were present in person, and as many more rep-resented by proxy, and after a few subsequent meetings the National Gun Association was in-

# A DEER HUNT WITH A JACK.

IS THE PRACTICE OF BUSTING WITH A LIGHT SPORTSMANLIKE?

One Man's Experience of Shooting Beer from Behind a Jack Light at a Sait Lick in the Adirondacks The Contri-ance Used-The Eyes of the Dying Bos.

Men who have shot deer in every way known bunters and men who never got any nearer killing a deer than sitting in a boat and watching the guide shoot have been talking a good deal lately as to whether or not it is portsmanlike to shoot a deer from behind a jack light," said Lieut. Oscar King, at the Lo tos Club, one day last week. "My experience n jacking deer was confined to one bunt, and am not prepared to say that it was spearemaulike. I had killed many deer before that one, but none under similar circumstances, and none that haunted me as that doe did.

"Shooting deer on a runway, stalking them when the first snow falls, or blazing away at them from horseback, as they do in Florida, are all good and legitimate ways to kill them, But paddling up to them in the dark, daring them with a bright jack light, and then firing both barrels of buckshot at them is not a feat to be proud of, in my opinion. I did it for the first and last time five years ago on Round Pond in the Adirondacks. I went up there for my ...ealth and incidentally to do a little fishing. To get the most health and the most fish a man should cut loose from hotels and live in camp, and that was what I did. Adam, my guide, had a log lean-to, thatched with bark. and there he made me comfortable. It was an ideal camp for a sportsman. When we got settled. Adam spoke up one night and satz. "Lieutenant, don't you think a little venison would be worth getting?'
"Just what we need, Adam,' said I, 'but

how are we to get it at this time of the year?" "Adam knew that I had never been in the Actrondacks before, and he explained to me that we might jack our deer or watch for them at a lick half a dozen miles above our camp. I decided to try the deer lick first, and an hour before supset of the next day Adam and 1 paddled across the pend, out the inlet, and into the river. A short row up the river brought us to the landing where we might drag our bat up on the bank and conceal it in the bushes. We followed the trail over a hill for half a mile and then down into a little valley partly filled by a swampy pond so narrow that one could shoot across it with the reasonable expectation of doing damage. Sait had been, strewn around an old stump near the water, and that was the spot we were to watch. Adam told me later that these sals licks were against the game laws, and they certainly should be prohibited. We concealed ourselves within easy range of this salt-baited stump, slipped cartridges loaded with buckshot into our double-barrelled breechloaders, and waited. Nothing came but mosquitoes and punkles. Do you know what a punky 1s? Well, he is smaller than a mosquite, and he

and waited. Nothing came but mosquitoes and punkies. Do you know what a punky 1s7 Well, he is smaller than a mosquito, and he has about twice as much bite. He combines the viciousness of the black fly with the persistence of the mosquito and he is always hungry. It became duck, and at the end two hours, after several millions of punkies had lunched from my blood. I weakened. I told Adam that we would go home.

"You may get a shot in the next hour,' protested my guide." This is going to be a good might for jacking, said Adam the next morning, 'and if you wish I will rig up a jack, and we'll try our luck again. There will be no moon, and there isn's much prospect of it raining."

"I wanted some venison, and by that time the bites of the punkles and mosquitoes were simply memories, so I decided to try jacking. Each guide has his own fads about a jack light. Adam used an ordinary bull's-eye lantern. He attached this to a round, thin board about the size of the top of a slik hat. Then he tacked a strip of harpess leather three inches broad around the edge of this board, thus making a cap, of which the board was the top. The bull's-eye rested securely on the tep of this cap, and the light that it threw out was guided by the movements of the wearer's head.

"Some men want their jack light on the bow of the boat," said Adam, 'but I wouldn's paddle such a light. A man can't keep it pointed right and do justice to his paddling. Let the fellow who is going to do the shooting have the jack on his head and then he can turn the light wherever he chooses."

"Adam's almanae was all right, and at 16 colock that night it was pitch dark and perfectly quiet. Our camp fire was the one bright spot on the lake. Around us the darkness had closed in. The noises of the woods about the boat as comfortably as the limited space would permittand rested my who is going to do the shooting have the jack on his head and then he can turn the light wherever he chooses."

"Adam's almanae was all right, and at 16 colock that night it was proposed i

search that great meeting of the association menty is an abundant survey. As the sheep of the street of the street